

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
2 June 2005 (02.06.2005)

PCT

(10) International Publication Number
WO 2005/050984 A1

(51) International Patent Classification⁷: **H04N 5/445**

c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).
CAI, Jun [CN/SG]; c/o Prof. Holstlaan 6, NL-5656 AA
Eindhoven (NL).

(21) International Application Number:
PCT/IB2004/052444

(74) Agents: **SLENDERS, Petrus, J., W.** et al.; Prof. Holstlaan
6, NL-5656 AA Eindhoven (NL).

(22) International Filing Date:
16 November 2004 (16.11.2004)

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
03104291.4 20 November 2003 (20.11.2003) EP

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

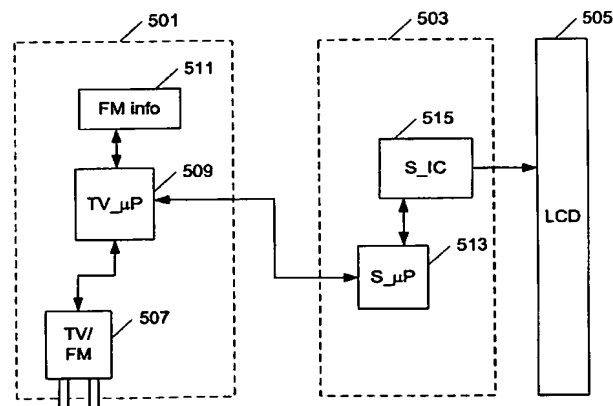
(71) Applicant (*for all designated States except US*): **KONIN-
KLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL];
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **LAM, Weng, K.**
[SG/SG]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven
(NL). **ZHANG, Chunrui** [CN/SG]; c/o Prof. Holstlaan 6,
NL-5656 AA Eindhoven (NL). **WIN, Naing** [MM/SG];

[Continued on next page]

(54) Title: AUDIO INFORMATION DISPLAY IN A MULTIMODE DISPLAY DEVICE



(57) Abstract: The present invention relates to a multimode display device (101) comprising a display area, where said display device is, in a first mode, adapted for displaying display-focused applications on the display area, where said display device is, in a second mode, adapted for displaying audio-specific information on the display area describing audio being played back and where the display device is, in a third mode, adapted for simultaneously displaying independent display-focused applications and audio-specific information on the display area, the device comprises: receiving means (307) adapted for receiving audio data comprising said audio-specific information; processing means (309) adapted for displaying said audio-specific information on said display area. Thereby the user can choose to view the audio-specific information on the display device, while listening to the audio. Because of the separate processing means for adding the audio-specific information on the display area, the information can be added without obstructing the view of the display-focused application. This can advantageously be used e.g. for the FM Radio feature in an LCD TV Monitor product, where the user can view the FM Radio channel frequency when selecting different radio broadcasting stations.

**Declaration under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ,

BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Published:

- with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.